

# Pender County Planning and Community Development

## Planning Division

805 S. Walker Street  
PO Box 1519  
Burgaw, NC 28425



Phone: 910-259-1202  
Fax: 910-259-1295  
[www.pendercountync.gov](http://www.pendercountync.gov)

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## Application Information Major Site Development Plan

**Case Number:** SDP 2024-411

**Application Type:** Major Site Development Plan

**Applicant:** Wesley Wooten, TW AG & Timber, LLC

**Owners:** TW AG & Timber, LLC

**Location:** 180 NC HWY 210 W & 220 NC HWY 210 W.

**Property ID #(s):** 3282-87-3771-0000 & 3282-88-1093-0000

**Description:** Development plan application for the construction of an approximately 1,250 sq ft building and associated site work for United Rentals.

**Current Zoning:** CZ-6

**Technical Review Committee Meeting:** July 7<sup>th</sup>, 2024

**Board of County Commissioners/Planning Board Meeting:** N/A

## Application Materials

Application Package

Site Plan

# **APPLICATION PACKAGE**

# Pender County Planning and Community Development



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## Major Site Development Plan Submission

Applications will be considered for the Technical Review Committee hearing and reviewed by Staff only when deemed complete. The application will be regarded as incomplete until the following items are received by the Planning and Community Development Staff.

1.  **Pre-submittal Meeting**  
Date of Meeting 1/4/2024
2.  **Signed Application**
3.  **Payment**  
\$250
4.  **Paper Plan Sets**  
Two (2) 24 x 36, Four (4) 11 x 17
5.  **Digital Submission**  
For all documents submitted in paper copy, provide a digital version. These may be emailed or uploaded to a share folder. Physical media such as CD or USB drives will not be accepted.
6.  **Adjacent Property List**  
A list of names and addresses, as obtained from the county tax listings and tax abstract, to the owners of all properties located within 500-feet of the perimeter of the project bounds.
7.  **Adjacent Property Envelopes**  
The applicant shall provide a set of business envelopes addressed to each of the owners of all properties located within 500-feet of the perimeter of the project bounds and accompanied with the amount of postage required for first class postage. Do not include return address or company branding on envelopes.
8.  **Permits**  
Include any permits issued on the project including but not limited to: environmental, traffic, utility, or site specific conditions.
9.  **Site Plan Requirements**  
A prepared site plan in accordance with the Unified Development Ordinance standards Section 6.3, Pender County Collector Street Plan, Pender County Transportation Plan, other approved State of Federal Transportation Improvement Plan, or any other adopted plan in Pender County.  
(See Major Site Development Checklist)

I certify that all information presented in this application is accurate to the best of my knowledge.

Signature of Applicant

*Wesley Wooten*

Date

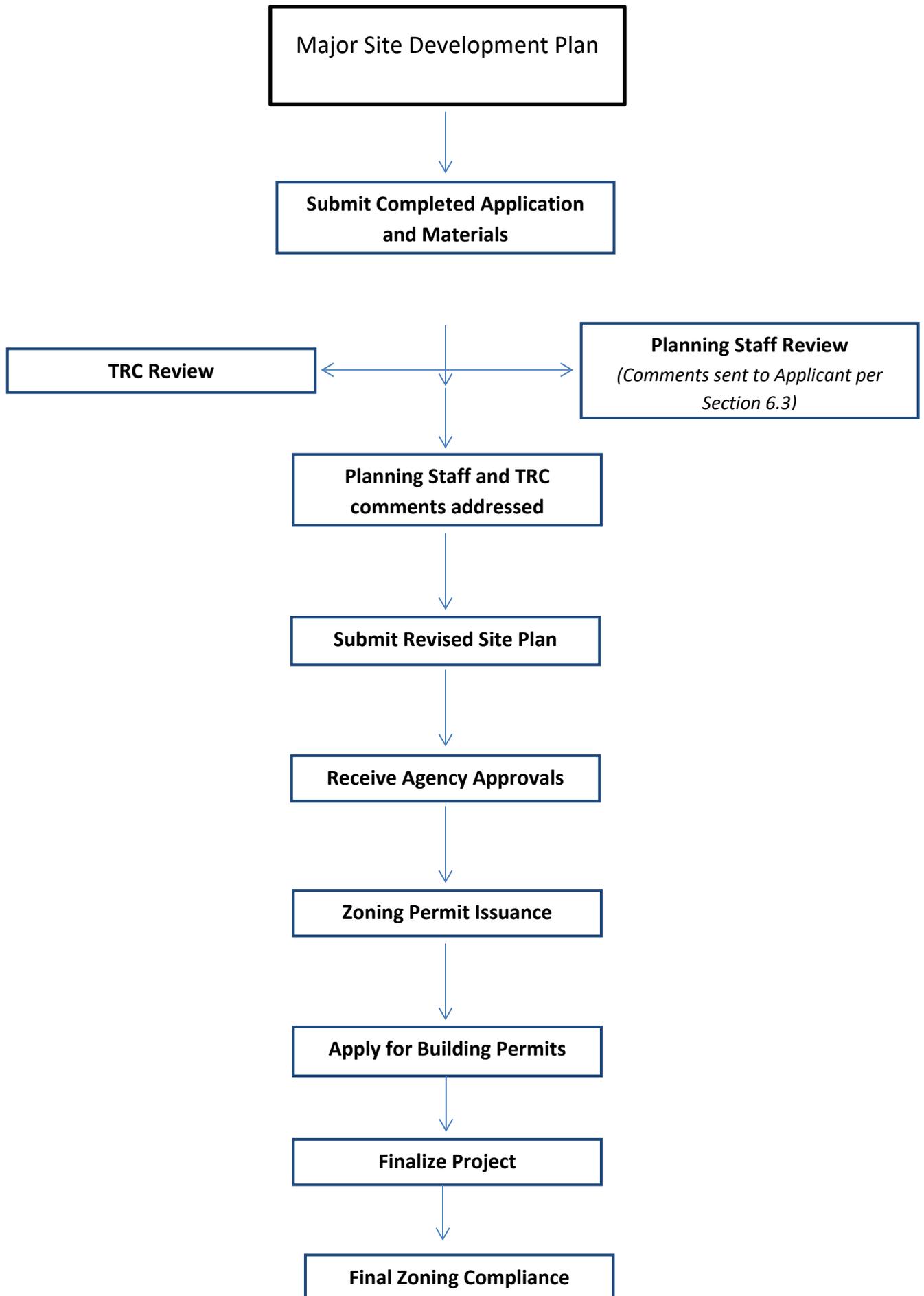
5/16/24

Printed Name

Wesley Wooten

Staff Initials: \_\_\_\_\_

Date: \_\_\_\_\_



## **Major Site Development Plan Specific Requirements**

### **1. Major Site Development Application Submittal**

- Site Plan (per Section 6.3)
  - Scale
  - North Arrow
  - All property information (zoning, setbacks, PIN #)
  - Adjacent property info (owner, zoning, use, PIN #)
  - References to any previously approved plans
  - Utility providers
  - All existing and proposed structures
  - Buffering (Section 8.2.6) & Landscaping (8.3)
  - Parking (Section 7.10)
  - Lighting
  - Cross Access Connections (Section 7.4.4)
  - AM/PM Peak Hour Trip Calculations (TIA required with 100 AM/PM trips or >1,000 trips per day)
  - Soil Erosion and Sedimentation Control Plan
  - Location of all environmental features
  - Stormwater management features
  - Proposed accesses, easements, streets, and sidewalks
- Permits received

### **2. TRC Meeting**

- Site Plan Review
- Agency comments/requirements

### **3. Post-TRC Meeting**

- Submit site plan with revisions
- Receive agency approvals
- Forward all agency approvals to Planning Staff.

### **4. Approval of Site Plan**

- All TRC comments and agency requirements addressed
- Zoning approval allows for building permit process to begin
- Apply for building permits

### **5. Final Zoning**

- Site Visit to check the following:
  - Landscaping
  - Buffering
  - Parking

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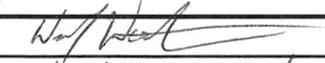
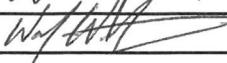
## MAJOR AND MINOR SITE DEVELOPMENT APPLICATION

THIS SECTION FOR OFFICE USE					
Date:	Permit Number:	Permit Fee:	Invoice Number:		
*Zoning Approval ONLY: YES / NO		Final Zoning Compliance Approved: YES / NO / N/A			
Type of Site Development Plan:	<input checked="" type="checkbox"/> Major	<input type="checkbox"/> Minor			
SECTION 1: GENERAL INFORMATION					
Applicant's Name:	Wesley Wooten TW Ag + Timber, LLC	Property Owner's Name:	TW Ag + Timber, LLC		
Applicant's Address:	8155 Malpass corner Road	Property Owner's Address:	same		
City, State, & Zip	Warrick, NC 28435	City, State, & Zip	↓		
Phone Number:	910-604-0049	Phone Number:			
Email Address:	wesley@LewisFarmsandliquidwaste.com	Email Address:			
Legal relationship of applicant to landowner:	same				
SECTION 2: PROJECT INFORMATION					
PIN (Property Id #):	3282-86-1093 3282-87-3771	Total property acreage:	6.2		
Zoning:	CZ-6	Acreage to be disturbed:	2.26		
Water Provider:	Pender Co	Wastewater Provider:	On-site		
Directions to Site:	1240' West from Hwy 17 + Hwy 210 intersection	Township:	Hampstead		
		Road Type:	(Public/Private/Both)		
Lot Size:	5.18 ac	Sq Ft of Building:	5769	Building Height:	20
Setbacks	Front: 25'	Side: 10'	Rear: 10'		
NAICS Code/Use:					
Business Name:	United Rentals				
Describe activities to be undertaken on project site:	Paving, minor grading, infiltration basin installation, new 1,250sf structure, lighting				
Ownership:	Number of Employees:	Number of Members:	Seating Capacity:		
<input checked="" type="checkbox"/> Private <input type="checkbox"/> Public	2	-	-		

*\*If the applicant is not the owner of the property, a notarized letter from the property owner may be required*

\*Zoning approval is for the use being proposed ONLY, other department approvals may be required i.e. Fire Marshal, Environmental Health, Permitting, etc...

<b>SECTION 4: ADDITIONAL COMMENTS</b>

<b>SECTION 5: SIGNATURES</b>			
<b>Applicant's Signature</b>		<b>Date:</b>	5/16/24
<b>Applicant's Name Printed</b>	Wesley Wooten	<b>Date:</b>	
<b>Owner's Signature</b>		<b>Date:</b>	5/16/24
<b>Owner's Name Printed</b>		<b>Date:</b>	
<b>Planning Staff:</b>		<b>Date:</b>	

# **SITE PLAN(S)**





V:\02\_188.2\_75\Documents\T Drive (Projects)\Library\2023\202801.00 - TW AG + Timber - 180 NC Hwy 210 - Hampstead, Pender County - United Rentals Site Plan\Drawings\C101-ExistingConditions.dwg, May 16, 2024, 2:42pm



LINE TABLE		
LINE	BEARING	LENGTH
L4	N47° 31' 55"E	10.35
L5	S43° 45' 32"E	50.00
L6	S52° 23' 53"W	19.83

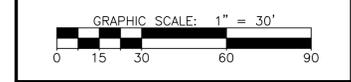
**FOR REVIEW ONLY**  
NOT RELEASED FOR SCALE  
CONSTRUCTION

**NOTES**

- EXISTING CONTOUR DATA OBTAINED IN DIGITAL FORMAT FROM NC FRIS IN DECEMBER 2023.

**LEGEND**

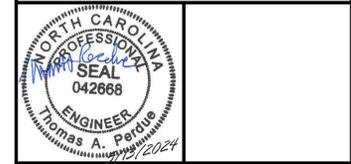
- 110 --- INDEX CONTOUR
- 108 --- INTERMEDIATE CONTOUR
- --- PROPERTY LINE
- --- ADJOINING PROPERTIES
- x-x- FENCE
- --- RIGHT-OF-WAY
- --- CREEK
- ss --- EX. SANITARY SEWER
- w --- EX. WATER LINE
- ss --- NEW SANITARY SEWER
- --- NEW WATER LINE



REVISIONS		
NO.	DATE	DESCRIPTION

PROJECT MANAGER: TAP PROJECT ENGINEER: DL  
DRAWN BY: DL CHECKED BY: TAP

DATE: MAY 13, 2024



**MacCONNELL & Associates, P. C.**  
501 CASCADE POINTE LANE, SUITE 103  
CARY, NORTH CAROLINA 27513  
P.O. BOX 129  
MORRISVILLE, NORTH CAROLINA 27560  
LICENSE No. C-1039 TEL: (919) 467-1239 FAX: (919) 319-6510

**TW AG + TIMBER, LLC  
UNITED RENTALS**

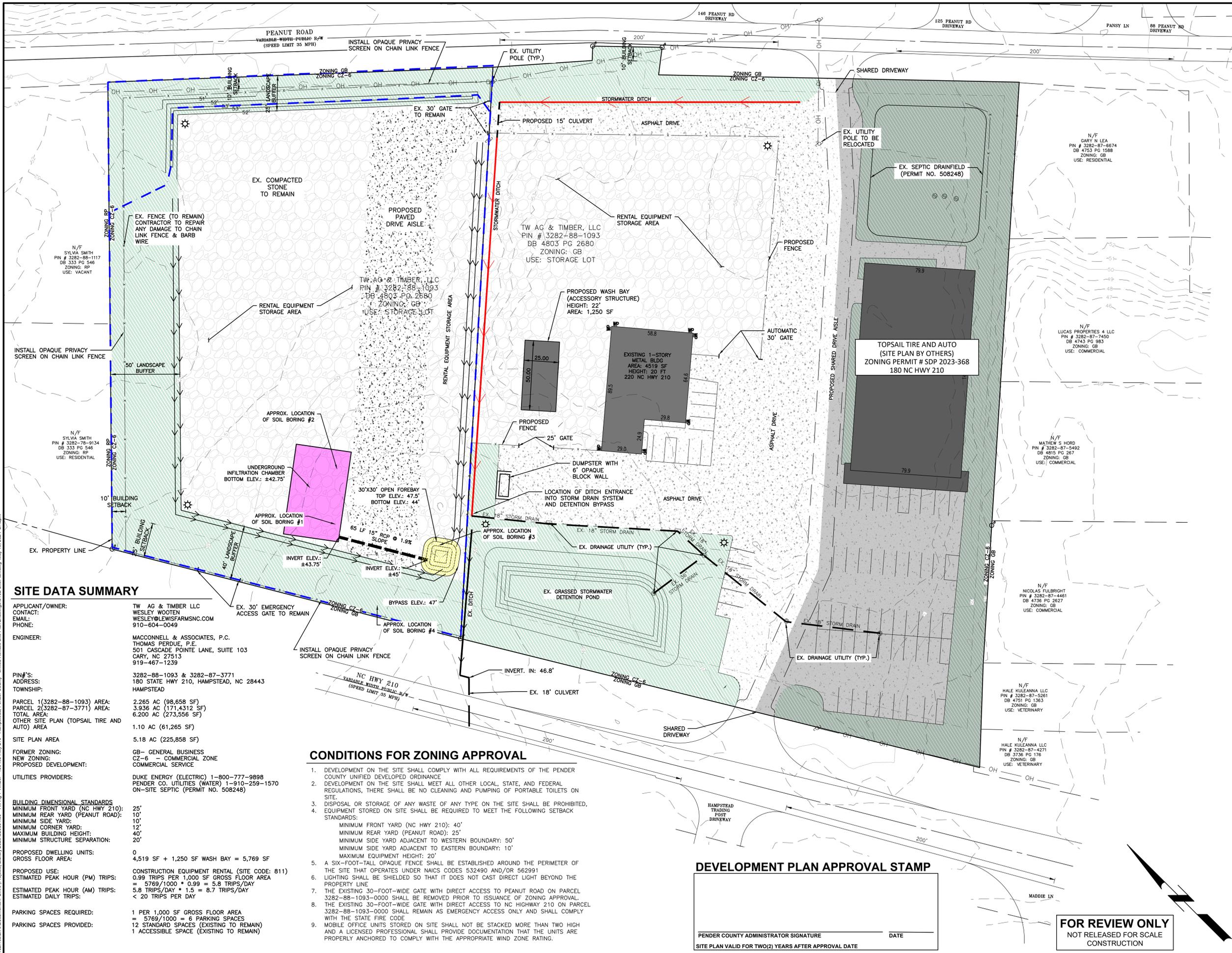
**SITE PLAN MODIFICATION**

**HAMPSTEAD, PENDER  
COUNTY, NC**

**PRE-CONSTRUCTION  
CONDITIONS**

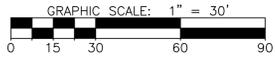
PROJECT NUMBER <b>C20801.00</b>	DRAWING NUMBER <b>C-101</b>
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C20801.00 - TW AG + TIMBER, LLC - UNITED RENTALS - SITE PLAN MODIFICATION



- ### NOTES
- EXISTING CONTOUR DATA OBTAINED IN DIGITAL FORMAT FROM NC FRIS IN DECEMBER 2023.
  - ALL SIGNAGE TO MEET THE REQUIREMENTS OF SECTION 9 OF THE PENDER COUNTY UNIFIED DEVELOPMENT ORDINANCE (UDO).
  - EXISTING LANDSCAPE AND BUFFERING TO REMAIN PER ARTICLE 8 OF THE PENDER COUNTY UDO.
  - ALL OUTDOOR LIGHTING SHALL COMPLY WITH ARTICLE 7.11 OF THE PENDER COUNTY UDO.

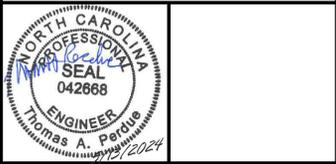
- ### LEGEND
- 110 INDEX CONTOUR
  - 108 INTERMEDIATE CONTOUR
  - SOLID LINE PROPERTY LINE
  - DASHED LINE ADJOINING PROPERTIES
  - X FENCE
  - DASHED LINE RIGHT-OF-WAY
  - CREEK
  - SS EX. SANITARY SEWER
  - W EX. WATER LINE
  - SS NEW SANITARY SEWER
  - W NEW WATER LINE
  - LANDSCAPED AREAS
  - ☼ LIGHT POLE
  - WP WALLPACK



REVISIONS		
NO.	DATE	DESCRIPTION

PROJECT MANAGER:	PROJECT ENGINEER:
TAP	DL
DRAWN BY:	CHECKED BY:
DL	TAP

DATE: MAY 13, 2024



**MacCONNELL & Associates, P. C.**  
 501 CASCADE POINTE LANE, SUITE 103  
 CARY, NORTH CAROLINA 27513  
 P.O. BOX 129  
 MORRISVILLE, NORTH CAROLINA 27560  
 LICENSE No. C-1039 TEL: (919) 467-1239 FAX: (919) 319-6510

**TW AG + TIMBER, LLC**  
**UNITED RENTALS**  
**SITE PLAN MODIFICATION**  
**HAMPSTEAD, PENDER COUNTY, NC**

<b>SITE PLAN</b>	
PROJECT NUMBER	DRAWING NUMBER
<b>C20801.00</b>	<b>C-102</b>

### SITE DATA SUMMARY

**APPLICANT/OWNER:** TW AG & TIMBER LLC  
**CONTACT:** WESLEY WOOTEN  
**EMAIL:** WESLEY@LEWISFARMSNC.COM  
**PHONE:** 910-604-0049

**ENGINEER:** MACCONNELL & ASSOCIATES, P.C.  
 THOMAS PERDUE, P.E.  
 501 CASCADE POINTE LANE, SUITE 103  
 CARY, NC 27513  
 919-467-1239

**PIN#S:** 3282-88-1093 & 3282-87-3771  
**ADDRESS:** 180 STATE HWY 210, HAMPSTEAD, NC 28443  
**TOWNSHIP:** HAMPSTEAD

**PARCEL 1 (3282-88-1093) AREA:** 2.265 AC (98,658 SF)  
**PARCEL 2 (3282-87-3771) AREA:** 3.936 AC (171,432 SF)  
**TOTAL AREA:** 6.200 AC (273,556 SF)  
**OTHER SITE PLAN (TOPSAIL TIRE AND AUTO) AREA:** 1.10 AC (61,265 SF)

**SITE PLAN AREA:** 5.18 AC (225,858 SF)

**FORMER ZONING:** GB - GENERAL BUSINESS  
**NEW ZONING:** CZ-6 - COMMERCIAL ZONE  
**PROPOSED DEVELOPMENT:** COMMERCIAL SERVICE

**UTILITIES PROVIDERS:** DUKE ENERGY (ELECTRIC) 1-800-777-9898  
 PENDER CO. UTILITIES (WATER) 1-910-259-1570  
 ON-SITE SEPTIC (PERMIT NO. 508248)

**BUILDING DIMENSIONAL STANDARDS**  
 MINIMUM FRONT YARD (NC HWY 210): 25'  
 MINIMUM REAR YARD (PEANUT ROAD): 10'  
 MINIMUM SIDE YARD: 10'  
 MINIMUM CORNER YARD: 12'  
 MAXIMUM BUILDING HEIGHT: 40'  
 MINIMUM STRUCTURE SEPARATION: 20'

**PROPOSED DWELLING UNITS:** 0  
**GROSS FLOOR AREA:** 4,519 SF + 1,250 SF WASH BAY = 5,769 SF

**PROPOSED USE:** CONSTRUCTION EQUIPMENT RENTAL (SITE CODE: 811)  
**ESTIMATED PEAK HOUR (PM) TRIPS:** 0.99 TRIPS PER 1,000 SF GROSS FLOOR AREA = 5.769/1000 \* 0.99 = 5.8 TRIPS/DAY  
**ESTIMATED PEAK HOUR (AM) TRIPS:** 5.8 TRIPS/DAY \* 1.5 = 8.7 TRIPS/DAY  
**ESTIMATED DAILY TRIPS:** < 20 TRIPS PER DAY

**PARKING SPACES REQUIRED:** 1 PER 1,000 SF GROSS FLOOR AREA = 5.769/1000 = 6 PARKING SPACES  
**PARKING SPACES PROVIDED:** 12 STANDARD SPACES (EXISTING TO REMAIN)  
 1 ACCESSIBLE SPACE (EXISTING TO REMAIN)

### CONDITIONS FOR ZONING APPROVAL

- DEVELOPMENT ON THE SITE SHALL COMPLY WITH ALL REQUIREMENTS OF THE PENDER COUNTY UNIFIED DEVELOPED ORDINANCE
- DEVELOPMENT ON THE SITE SHALL MEET ALL OTHER LOCAL, STATE, AND FEDERAL REGULATIONS, THERE SHALL BE NO CLEANING AND PUMPING OF PORTABLE TOILETS ON SITE.
- DISPOSAL OR STORAGE OF ANY WASTE OF ANY TYPE ON THE SITE SHALL BE PROHIBITED.
- EQUIPMENT STORED ON SITE SHALL BE REQUIRED TO MEET THE FOLLOWING SETBACK STANDARDS:
  - MINIMUM FRONT YARD (NC HWY 210): 40'
  - MINIMUM REAR YARD (PEANUT ROAD): 25'
  - MINIMUM SIDE YARD ADJACENT TO WESTERN BOUNDARY: 50'
  - MINIMUM SIDE YARD ADJACENT TO EASTERN BOUNDARY: 10'
  - MAXIMUM EQUIPMENT HEIGHT: 20'
- A SIX-FOOT-TALL OPAQUE FENCE SHALL BE ESTABLISHED AROUND THE PERIMETER OF THE SITE THAT OPERATES UNDER NAICS CODES 532490 AND/OR 562991
- LIGHTING SHALL BE SHIELDED SO THAT IT DOES NOT CAST DIRECT LIGHT BEYOND THE PROPERTY LINE
- THE EXISTING 30-FOOT-WIDE GATE WITH DIRECT ACCESS TO PEANUT ROAD ON PARCEL 3282-88-1093-0000 SHALL BE REMOVED PRIOR TO ISSUANCE OF ZONING APPROVAL
- THE EXISTING 30-FOOT-WIDE GATE WITH DIRECT ACCESS TO NC HIGHWAY 210 ON PARCEL 3282-88-1093-0000 SHALL REMAIN AS EMERGENCY ACCESS ONLY AND SHALL COMPLY WITH THE STATE FIRE CODE
- MOBILE OFFICE UNITS STORED ON SITE SHALL NOT BE STACKED MORE THAN TWO HIGH AND A LICENSED PROFESSIONAL SHALL PROVIDE DOCUMENTATION THAT THE UNITS ARE PROPERLY ANCHORED TO COMPLY WITH THE APPROPRIATE WIND ZONE RATING.

### DEVELOPMENT PLAN APPROVAL STAMP

PENDER COUNTY ADMINISTRATOR SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

SITE PLAN VALID FOR TWO(2) YEARS AFTER APPROVAL DATE

**FOR REVIEW ONLY**  
 NOT RELEASED FOR SCALE  
 CONSTRUCTION

V:\2024\180270\Documents\Site Plan\Drawings\C102-SitePlan.dwg May 15, 2024 2:49pm

C20801.00 - TW AG + TIMBER, LLC - UNITED RENTALS - SITE PLAN MODIFICATION

1 - Pre Development - Drainage Area #1				
	C	WC	(SF)	(AC)
<b>Total Drainage Area:</b>			23,213	0.53 acres
Total Grass/Landscape area:	0.15	0.06	8,870	0.20 acres
Total Asphalt Area	0.95	0.03	701	0.02 acres
Total Building Area	0.95	0.00	-	- acres
Total Gravel Storage Area	0.85	0.50	13,642	0.31 acres
Weighted C-Value for Drainage Area #1	0.59			

Rational Method  $Q=C \cdot I \cdot A$

Tc = 5 minutes

	I	Q (cfs)
10-year	9.54	2.96
25-year	10.8	3.37
50-year	11.7	3.65

2 - Pre Development - Drainage Area #2				
	C	WC	(SF)	(AC)
<b>Total Drainage Area:</b>			166,304	3.82 acres
Total Grass/Landscape area:	0.15	0.04	49,507	1.14 acres
Total Asphalt Area	0.95	0.19	33,664	0.77 acres
Total Building Area	0.95	0.10	17,348	0.40 acres
Total Gravel Storage Area	0.85	0.34	65,785	1.51 acres
Weighted C-Value for Drainage Area #1	0.67			

Rational Method  $Q=C \cdot I \cdot A$

Tc = 5 minutes

	I	Q (cfs)
10-year	9.54	24.49
25-year	10.8	27.72
50-year	11.7	30.03

3 - Pre Development - Drainage Area #3				
	C	WC	(SF)	(AC)
<b>Total Drainage Area:</b>			80,483	1.85 acres
Total Grass/Landscape area:	0.15	0.01	2,818	0.06 acres
Total Asphalt Area	0.95	0.00	-	- acres
Total Building Area	0.95	0.00	-	- acres
Total Gravel Storage Area	0.85	0.82	77,665	1.78 acres
Weighted C-Value for Drainage Area #1	0.83			

Rational Method  $Q=C \cdot I \cdot A$

Tc = 5 minutes

	I	Q (cfs)
10-year	9.54	14.55
25-year	10.8	16.47
50-year	11.7	17.84

1 - Post Development - Drainage Area #1				
	C	WC	(SF)	(AC)
<b>Total Drainage Area:</b>			13,556	0.31 acres
Total Grass/Landscape area:	0.15	0.15	13,433	0.31 acres
Total Asphalt Area	0.95	0.01	110	0.00 acres
Total Building Area	0.95	0.00	-	- acres
Total Gravel Storage Area	0.85	0.00	13	0.00 acres
Weighted C-Value for Drainage Area #1	0.16			

Rational Method  $Q=C \cdot I \cdot A$

Tc = 5 minutes

	I	Q (cfs)
10-year	9.54	0.47
25-year	10.8	0.53
50-year	11.7	0.57

2 - Post Development - Drainage Area #2				
	C	WC	(SF)	(AC)
<b>Total Drainage Area:</b>			166,315	3.82 acres
Total Grass/Landscape area:	0.15	0.04	47,944	1.10 acres
Total Asphalt Area	0.95	0.36	63,169	1.45 acres
Total Building Area	0.95	0.11	18,598	0.43 acres
Total Gravel Storage Area	0.85	0.19	36,604	0.84 acres
Weighted C-Value for Drainage Area #1	0.70			

Rational Method  $Q=C \cdot I \cdot A$

Tc = 5 minutes

	I	Q (cfs)
10-year	9.54	25.40
25-year	10.8	28.76
50-year	11.7	31.15

3 - Post Development - Drainage Area #3				
	C	WC	(SF)	(AC)
<b>Total Drainage Area:</b>			90,136	2.07 acres
Total Grass/Landscape area:	0.15	0.04	22,672	0.52 acres
Total Asphalt Area	0.95	0.18	17,276	0.40 acres
Total Building Area	0.95	0.00	-	- acres
Total Gravel Storage Area	0.85	0.47	50,188	1.15 acres
Weighted C-Value for Drainage Area #1	0.69			

Rational Method  $Q=C \cdot I \cdot A$

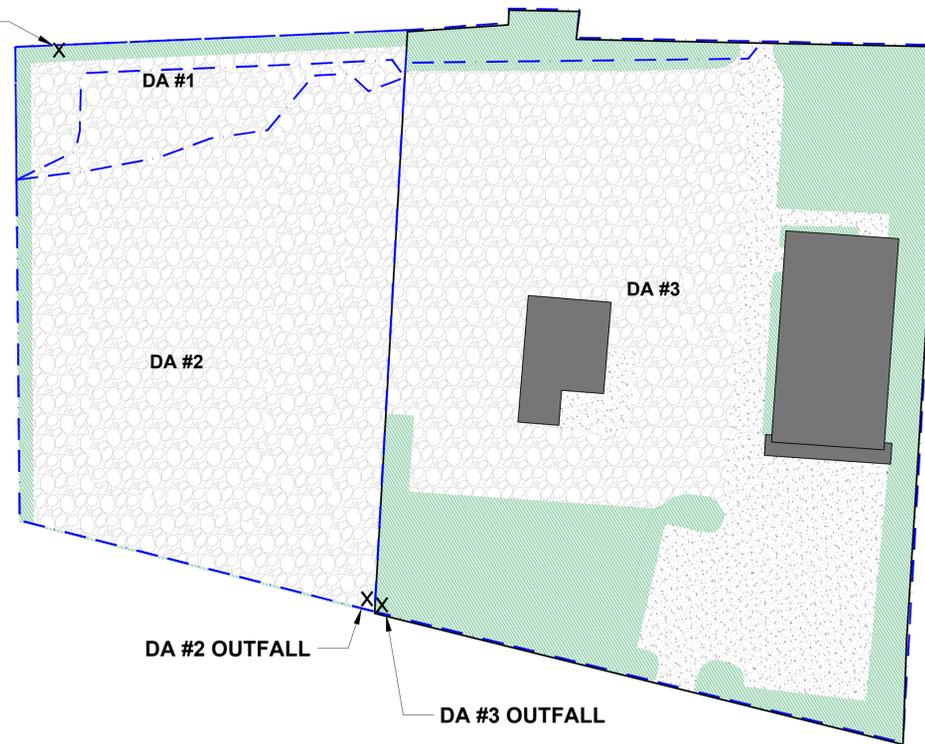
Tc = 5 minutes

	I	Q (cfs)
10-year	9.54	13.68
25-year	10.8	15.49
50-year	11.7	16.78

Pre Development vs Post Development Peak Flows

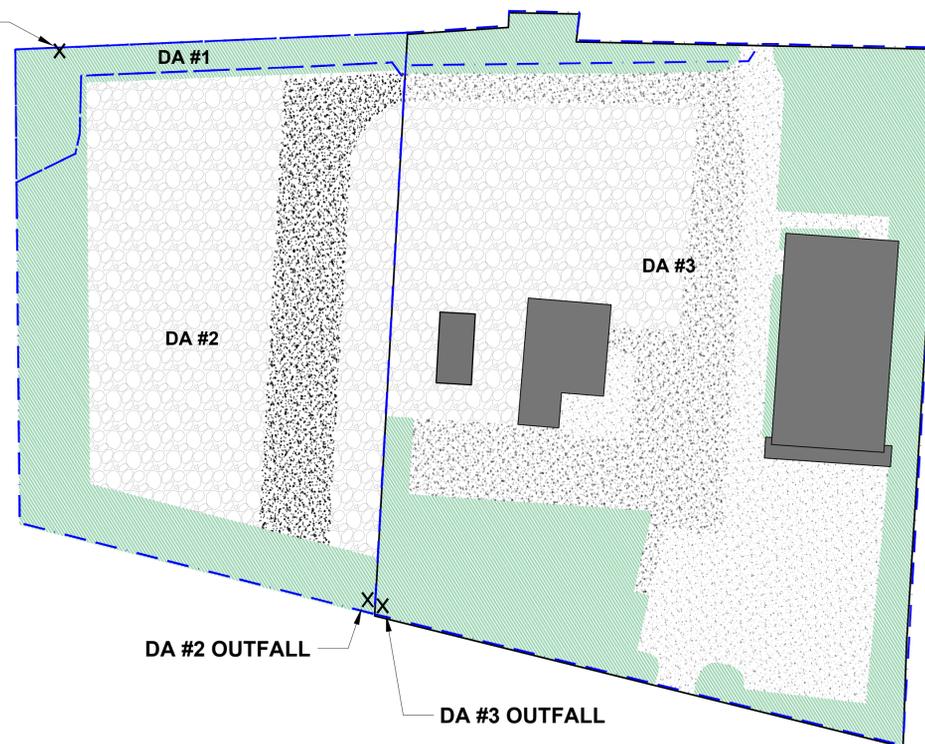
	Drainage Area #1			Drainage Area #2			Drainage Area #3		
	Pre	Post	%Change	Pre	Post	%Change	Pre	Post	%Change
10-year	2.96	0.47	-84%	24.49	25.40	4%	14.55	13.68	-6%
25-year	3.37	0.53	-84%	27.72	28.76	4%	16.47	15.49	-6%
50-year	3.65	0.57	-84%	30.03	31.15	4%	17.84	16.78	-6%

DA #1 OUTFALL



PRE-DEVELOPMENT DRAINAGE AREAS

DA #1 OUTFALL



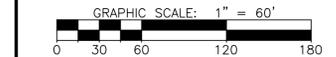
POST-DEVELOPMENT DRAINAGE AREAS

NOTES

1. STORMWATER MANAGEMENT PLAN SHALL BE IN ACCORDANCE WITH SECTION 7.9 OF THE PENDER COUNTY UNIFIED DEVELOPMENT ORDINANCE (UDO).

LEGEND

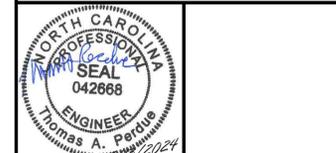
- 110 --- INDEX CONTOUR
- 108 --- INTERMEDIATE CONTOUR
- --- PROPERTY LINE
- --- ADJOINING PROPERTIES
- x- -x- FENCE
- --- RIGHT-OF-WAY
- --- CREEK
- ss --- EX. SANITARY SEWER
- w --- EX. WATER LINE
- ss --- NEW SANITARY SEWER
- --- NEW WATER LINE
- [Green Hatched] PERVIOUS/LANDSCAPED AREAS
- [Grey Hatched] ASPHALT
- [Blue Hatched] COMPACTED GRAVEL
- [Grey Solid] STRUCTURE



REVISIONS		
NO.	DATE	DESCRIPTION

PROJECT MANAGER: TAP	PROJECT ENGINEER: DL
DRAWN BY: DL	CHECKED BY: TAP

DATE:  
MAY 13, 2024



**MacCONNELL & Associates, P. C.**  
501 CASCADE POINTE LANE, SUITE 103  
CARY, NORTH CAROLINA 27513  
P.O. BOX 129  
MORRISVILLE, NORTH CAROLINA 27560  
No. C-1039 TEL: (919) 467-1239 FAX: (919) 319-6510

**TW AG + TIMBER, LLC  
UNITED RENTALS**

**SITE PLAN MODIFICATION**

**HAMPSTEAD, PENDER  
COUNTY, NC**

**STORMWATER MANAGEMENT  
PLAN**

PROJECT NUMBER <b>C20801.00</b>	DRAWING NUMBER <b>C-103</b>
------------------------------------	--------------------------------

**FOR REVIEW ONLY**  
NOT RELEASED FOR SCALE  
CONSTRUCTION



**NOTES**

1. SILT FENCE OUTLETS ARE SPACED EVERY 100-FT AND ARE DESIGNED TO HANDLE 0.25 ACRES OF RUNOFF OR LESS.

**LEGEND**

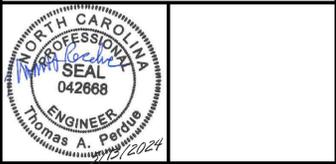
- 110 --- INDEX CONTOUR
- 108 --- INTERMEDIATE CONTOUR
- --- PROPERTY LINE
- --- ADJOINING PROPERTIES
- x-x- FENCE
- --- RIGHT-OF-WAY
- --- CREEK
- ss --- EX. SANITARY SEWER
- w --- EX. WATER LINE
- ss --- NEW SANITARY SEWER
- --- NEW WATER LINE
- [Green Hatched Box] PERVIOUS/LANDSCAPED AREAS
- [Blue Arrow] PROPOSED SILT FENCE
- [Red Arrow] PROPOSED DIVERSION BERM
- [Circle with Arrow] PROPOSED SILT FENCE OUTLET



REVISIONS		
NO.	DATE	DESCRIPTION

PROJECT MANAGER: TAP	PROJECT ENGINEER: DL
DRAWN BY: DL	CHECKED BY: TAP

DATE:  
MAY 13, 2024



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**TW AG + TIMBER, LLC  
 UNITED RENTALS**

**SITE PLAN MODIFICATION**

**HAMPSTEAD, PENDER  
 COUNTY, NC**

<b>EROSION CONTROL PLAN</b>	
PROJECT NUMBER <b>C20801.00</b>	DRAWING NUMBER <b>C-104</b>

**FOR REVIEW ONLY**  
 NOT RELEASED FOR SCALE  
 CONSTRUCTION

V:\02\_1882\_70\Documents\T-Drive (Projects)\Library\2023\C20801.00 - TW AG + Timber - 188 NC Hwy 210 - Hampstead, Pender County - United Rentals Site Plan Drawings\C103-SitePlanModification.dwg May 13, 2024 2:42pm  
 C20801.00 - TW AG + TIMBER, LLC - UNITED RENTALS - SITE PLAN MODIFICATION

**SEEDING SPECIFICATIONS**

- PERMANENT SEEDING: PERMANENT SEEDING IS REQUIRED FOR ALL AREAS DISTURBED BY CONSTRUCTION EXCEPT FOR AREAS COVERED BY STRUCTURES, PAVEMENTS, ETC.
- TEMPORARY SEEDING: TEMPORARY SEEDING IS REQUIRED FOR THOSE AREAS DISTURBED BY CONSTRUCTION AND LEFT EXPOSED FOR PERIODS OF 15 DAYS OR MORE BEFORE BEING BROUGHT TO FINAL GRADE AND PERMANENTLY SEEDED. THE FORCE MAIN SHALL BE SEEDED AT THE END OF EACH WORKING DAY TO MINIMIZE CONSTRUCTION DISTURBANCE ACTIVITIES.

**\*PRODUCTS:**

**MATERIALS:**

- FERTILIZER:
  - TEMPORARY SEEDING: PROVIDE 10-10-10 COMMERCIAL FERTILIZER CONFORMING TO STATUTORY REQUIREMENTS AND ALL RULES AND REGULATIONS ADOPTED BY THE NORTH CAROLINA DEPARTMENT OF AGRICULTURE.
  - PERMANENT SEEDING: PROVIDE 870 POUNDS OF 10-20-20 OR 1,740 POUNDS OF 5-10-10 PER ACRE COMMERCIAL FERTILIZER CONFORMING TO STATUTORY REQUIREMENTS AND ALL RULES AND REGULATIONS ADOPTED BY THE NORTH CAROLINA DEPARTMENT OF AGRICULTURE. IN SANDY SOILS, TYPICAL TO COASTAL PLAIN AND SANDHILLS, FERTILIZER RATES SHOULD BE INCREASED BY 20 PERCENT.
- LIMESTONE: PROVIDE LIMESTONE CONFORMING TO ALL STATUTORY REQUIREMENTS AND ALL RULES AND REGULATIONS ADOPTED BY THE NORTH CAROLINA DEPARTMENT OF AGRICULTURE.
- SEEDING: PROVIDE SEED CONFORMING TO ALL STATUTORY REQUIREMENTS AND ALL RULES AND REGULATIONS ADOPTED BY THE NORTH CAROLINA DEPARTMENT OF AGRICULTURE. PROVIDE SEED MIXTURES AS TABULATED BELOW. DELIVER SEED TO THE SITE IN ORIGINAL CONTAINERS BEARING THE APPROPRIATE GUARANTEED MIXTURES. SEED SHALL SHOW A PURITY OF NOT LESS THAN 90 PERCENT AND GERMINATION QUALITY OF NOT LESS THAN 85 PERCENT.
  - LATE WINTER AND EARLY SPRING (COASTAL PLAIN: DECEMBER 1 - APRIL 15; PIEDMONT: JANUARY 1 - MAY 1; MOUNTAINS >2,500 FEET: FEBRUARY 15 - MAY 15; MOUNTAINS <2,500 FEET: FEBRUARY 1 - MAY 1); THE TEMPORARY SEED MIXTURE FOR GENERAL AREAS SHALL CONSIST OF 120 POUNDS PER ACRE OF RYE (GRAIN) AND 50 POUNDS PER ACRE OF ANNUAL LESPEDEZA (KOBE IN PIEDMONT AND COASTAL PLAIN, KOREAN IN MOUNTAINS).
  - SUMMER (COASTAL PLAIN: APRIL 15 - AUGUST 15; PIEDMONT: MAY 1 - AUGUST 15; MOUNTAINS: MAY 15 - AUGUST 15); THE TEMPORARY SEED MIXTURE FOR GENERAL AREAS SHALL CONSIST OF 40 POUNDS PER ACRE OF GERMAN MILLET IN THE PIEDMONT AND MOUNTAINS A SMALL-STEMMED SUDAGRASS MAY BE SUBSTITUTED AT A RATE OF 50 POUNDS PER ACRE.
  - FALL (COASTAL PLAIN AND PIEDMONT: AUGUST 15 - DECEMBER 30; MOUNTAINS: AUGUST 15 - DECEMBER 15); THE TEMPORARY SEED MIXTURE FOR GENERAL AREAS SHALL CONSIST OF 120 POUNDS PER ACRE OF RYE (GRAIN).

- PERMANENT MIXTURE:
  - THE PERMANENT SEED MIXTURE FOR GENERAL AREAS SHALL CONSIST OF MINIMUM RATE OF 50 lbs./ac. PENSACOLA BAHIAGRASS, 30 lbs./ac. SERICEA LESPEDEZA, 10 lbs./ac. COMMON BERMUDA GRASS, AND 10 lbs./ac. GERMAN MILLET. THE BEST SEEDING DATES FOR THIS MIXTURE ARE FROM APRIL 1st TO JULY 15th.
  - OTHER MIXTURES: OTHER MIXTURES, AS APPROVED OR RECOMMENDED BY THE SOIL CONSERVATION SERVICE OR THE NORTH CAROLINA AGRICULTURAL EXTENSION OFFICE MAY BE USED.
- MULCH: MULCH ALL SEEDED AREAS, EXCEPT WHERE JUTE MESH IS REQUIRED AND DURING PERMANENT SEEDING. USE UNMULCHED, AIR-DRIED, THRESHED SMALL GRAIN STRAW FREE OF UNDESIRABLE WEED SEED. ANCHOR STRAW BY TACKLING WITH ASPHALT, NETTING, BY ROVING, OR THROUGH USE OF A MULCH ANCHORING TOOL.

- \*EXECUTION**
- FOLLOW PROCEDURES SET FORTH IN THE PUBLICATION "GUIDE FOR SEDIMENT CONTROL ON CONSTRUCTION SITES IN NORTH CAROLINA" BY THE SOIL CONSERVATION SERVICE OF THE UNITED STATES DEPARTMENT OF AGRICULTURE, AND AS SPECIFIED HEREIN.
  - SPREAD A MINIMUM OF FOUR (4) INCHES OF TOP SOIL OVER ALL DISTURBED AREAS TO THE FINISHED GRADE.
  - REMOVE ALL GRASS AND WEEDS AND SHAPE THE OVERALL AREA TO EVEN OUT HIGH AND LOW SPOTS.
  - SCARIFY SOIL TO A DEPTH OF THREE (3) INCHES AND WORK INTO A SATISFACTORY SEED BED BY DISKING OR THROUGH THE USE OF CULTIPACKERS, HARROWS, DRAGS, OR OTHER APPROVED MEANS.
  - THE PREPARATION OUTLINED ABOVE SHALL NOT BE DONE WHEN THE SOIL IS FROZEN, WET, OR OTHERWISE IN AN UNFAVORABLE CONDITION.
  - BEGIN AND COMPLETE SEEDING OPERATIONS, AS OUTLINED BELOW, AS SOON AS POSSIBLE AFTER FINAL OR INTERMEDIATE GRADING IS COMPLETED.
  - DISTRIBUTE LIME AND FERTILIZER, AS REQUIRED, UNIFORMLY OVER THE SEED BED. HARROW RAKE OR OTHERWISE WORK THESE ADDITIONS INTO THE SEED BED.
  - DISTRIBUTE SEED UNIFORMLY OVER THE ESTABLISHED SEED BED. LIGHTLY RAKE THE SURFACE OF THE SEED BED IN ORDER TO COVER SEED TO A MAXIMUM DEPTH OF 0.25 INCH.
  - COMPACT THE SEED BED WITH AN APPROVED ROLL OR DRAG AFTER COVERING THE SEED.
  - NO LIME, FERTILIZER, OR SEED SHALL BE APPLIED DURING A STRONG WIND, WHEN THE SOIL IS WET, OR WHEN THE SOIL IS OTHERWISE UNWORKABLE. SHOULD RAIN FOLLOW SEEDING BEFORE ROLLING IS INITIATED, THE SEED BED SHALL NOT BE ROLLED.
  - NO RIP-RAP IS TO BE PLACED ALONG THE BANKS OF NEW FILL. MAINTAIN THE AREA AND REPAIR ANY EROSION DAMAGE UNTIL A PERMANENT GROUND COVER IS ESTABLISHED. USE MULCH OR MESH AS REQUIRED.

- \*APPLICATION**
- TEMPORARY SEEDING: LATE WINTER - SUMMER:**
- APPLY LIME ACCORDING TO THE SOIL TESTS OR AT A RATE OF 2000 lbs./ac. BEFORE SEEDING.
  - APPLY FERTILIZER ACCORDING TO THE SOIL TESTS OR AT A RATE OF 750 lbs./ac.
  - SEED THE SEED BED WITH THE SPECIFIED SEED MIXTURE AT THE SPECIFIED RATE FOR THE RECOMMENDED PLANTING SEASON.
  - APPLY GRAIN STRAW AT A RATE OF 4000 lbs./ac. OR PROVIDE EQUIVALENT COVER OF ANOTHER SUITABLE COVER. MULCH SHALL BE ANCHORED IN A SUITABLE WAY. WHERE JUTE MESH IS REQUIRED, APPLY THE PRODUCT ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS AND ANCHOR WITH STEEL HAIRPIN-SHAPED WIRE STAPLES.
  - REFERTILIZE SEED BED IF GROWTH IS NOT FULLY ADEQUATE, AS DETERMINED BY THE ENGINEER. RE-SEED, FERTILIZE, AND MULCH ALL DAMAGED, BARE, AND ERODED AREAS IMMEDIATELY AND UNTIL A SUITABLE COVER IS ESTABLISHED.
- TEMPORARY SEEDING: FALL:**
- APPLY LIME ACCORDING TO THE SOIL TESTS OR AT A RATE OF 2000 lbs./ac. BEFORE SEEDING.
  - APPLY FERTILIZER ACCORDING TO THE SOIL TESTS OR AT A RATE OF 1000 lbs./ac.
  - SEED THE SEED BED WITH THE SPECIFIED SEED MIXTURE AT THE SPECIFIED RATE FOR THE RECOMMENDED PLANTING SEASON.
  - APPLY GRAIN STRAW AT A RATE OF 4000 lbs./ac. OR PROVIDE EQUIVALENT COVER OF ANOTHER SUITABLE COVER. MULCH SHALL BE SUITABLY ANCHORED. WHERE JUTE MESH IS REQUIRED, APPLY THE PRODUCT ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS AND ANCHOR WITH STEEL HAIRPIN-SHAPED WIRE STAPLES.
  - REFERTILIZE SEED BED IF GROWTH IS NOT FULLY ADEQUATE, AS DETERMINED BY THE ENGINEER. RE-SEED, FERTILIZE, AND MULCH ALL DAMAGED, BARE, AND ERODED AREAS IMMEDIATELY AND UNTIL A SUITABLE COVER IS ESTABLISHED.

- PERMANENT SEEDING: APPLICATION OF LIME, FERTILIZER, SEED, AND MULCH:**
- WHERE A NEAT APPEARANCE IS DESIRED, OMIT SERICEA.
  - USE COMMON BERMUDAGRASS ONLY ON ISOLATED SITES WHERE IT CANNOT BECOME A PEST. BERMUDAGRASS MAY BE REPLACED WITH 5 lbs./ac. CENTIPEDEGRASS.
  - SOIL AMENDMENTS: APPLY LIME AND FERTILIZER ACCORDING TO SOIL TESTS, OR APPLY 3200 lbs./ac. GROUND AGRICULTURAL LIMESTONE AND 870 POUNDS OF 10-20-20 OR 1,740 POUNDS OF 5-10-10 PER ACRE. FOR SANDY SOILS, TYPICAL TO COASTAL PLAIN AND SANDHILLS OF NORTH CAROLINA, FERTILIZER RATES SHOULD BE INCREASED BY 20 PERCENT.
  - SEED THE SEED BED WITH THE SPECIFIED SEED MIXTURE AT THE SPECIFIED RATE DURING RECOMMENDED PLANTING SEASONS. IF GRADING IS COMPLETED AT TIMES OTHER THAN THE RECOMMENDED SEASON, PROVIDE TEMPORARY SEEDING OR OTHER EROSION AND SEDIMENTATION PROTECTION APPROVED BY THE ENGINEER UNTIL THE APPROPRIATE PLANTING SEASON BEGINS.
  - MULCH: APPLY 4000 lbs./ac. GRAIN STRAW OR EQUIVALENT COVER OF ANOTHER SUITABLE MULCH. ANCHOR BY TACKLING ASPHALT, ROVING, OR NETTING OR BY CRIMPING WITH A MULCH ANCHORING TOOL. A DISC WITH BLADES SET NEARLY STRAIGHT MAY BE USED AS A MULCH ANCHORING TOOL.
  - MAINTENANCE: REFERTILIZE THE FOLLOWING APRIL WITH 50 lbs./ac. NITROGEN. REPEAT AS GROWTH REQUIRES. MOW ONLY ONCE PER YEAR. WHERE A NEAT APPEARANCE IS DESIRED, OMIT SERICEA AND MOW AS OFTEN AS NEEDED.

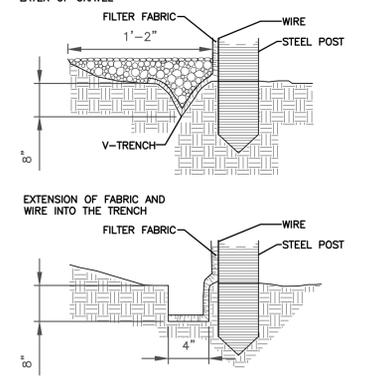
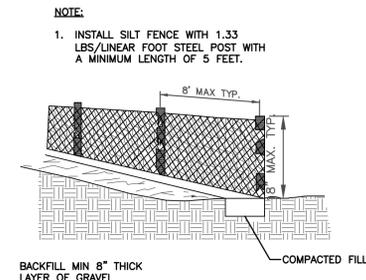
**CONSTRUCTION SCHEDULE**

- THE CONTRACTOR MUST COMPLY WITH THE REQUIREMENTS HEREIN:
- INSTALL EROSION CONTROL MEASURES AS REQUIRED, SUCH AS THE CONSTRUCTION ENTRANCE, DIVERSION BERMS, AND STRAW WADDLES.
  - CLEAR AND GRUB ANY WOODED AREAS TO BE DEVELOPED WITHIN LIMITS OF DISTURBANCE. STOCKPILE TOPSOIL AND SUITABLE FILL MATERIAL IN AREAS DESIGNATED AS STOCKPILES.
  - BEGIN GRADING ACTIVITIES AFTER ALL REQUIRED EROSION CONTROL MEASURES HAVE BEEN INSTALLED AND CONSTRUCTED. SALVAGE ANY TOPSOIL THAT MAY BE USED AFTER CONSTRUCTION.
  - SEED TEMPORARY AREAS THAT HAVE BEEN LEFT DORMANT FOR LONGER THAN 15 DAYS.
  - ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSPECTED WEEKLY AND AFTER EACH HEAVY RUNOFF PRODUCING RAINFALL. NEEDED REPAIRS SHALL BE MADE IMMEDIATELY.
  - AFTER CONSTRUCTION REMOVE ALL TEMPORARY STRUCTURES AND ENSURE ALL SEEDING IS COMPLETED FOR AREAS DISTURBED.

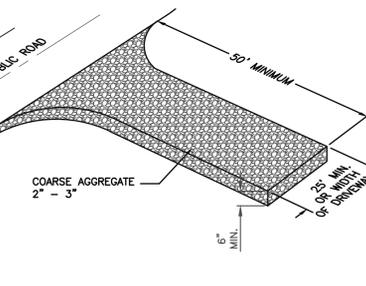
**MAINTENANCE PLAN**

- ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSPECTED WEEKLY AND AFTER EACH HEAVY STORMWATER-PRODUCING RAINFALL. ALL NEEDED REPAIRS SHALL BE MADE IMMEDIATELY TO PREVENT FURTHER DAMAGE AND EROSION. STRUCTURES THAT WILL BE MAINTAINED WILL INCLUDE:
  - CONSTRUCTION ENTRANCE/EXIT: INSPECT CONSTRUCTION ROAD SURFACE REGULARLY, MAINTAIN IN A CONDITION TO PREVENT SEDIMENT FROM LEAVING THE SITE, AND TOP-DRESS WHEN NEEDED. SEDIMENT TRANSPORTED TO PUBLIC ROADS SHALL BE REMOVED DAILY.
  - STRAW WADDLE: CLEAN OUT SEDIMENT, STRAW, LIMBS, OR OTHER DEBRIS WHEN NEEDED. ANTICIPATE SUBMERGENCE AND DEPOSITION ABOVE THE STRAW WADDLE AND EROSION FROM HIGH FLOWS AROUND THE EDGES OF THE STRAW WADDLE. CORRECT ALL DAMAGE IMMEDIATELY. IF SIGNIFICANT EROSION OCCURS BETWEEN STRAW WADDLES, ADDITIONAL MEASURES CAN BE TAKEN SUCH AS, INSTALLING ADDITIONAL WADDLES AT BERM OUTLETS.
  - SEEDING, FERTILIZING, AND MULCHING: SEEDED AREAS SHALL BE INSPECTED FOR FAILURE AND NECESSARY REPAIRS SHALL BE MADE WITHIN THE SAME SEASON, IF POSSIBLE.
- THE ANGLE FOR GRADED SLOPES AND FILLS SHALL BE NO GREATER THAN THE ANGLE THAT CAN BE RETAINED BY VEGETATIVE COVER OR OTHER ADEQUATE EROSION CONTROL DEVICES OR STRUCTURES. IN ANY EVENT, SLOPES LEFT EXPOSED WILL, WITHIN 21 CALENDAR DAYS OF COMPLETION OF ANY PHASE OF GRADING, BE PLANTED OR OTHERWISE PROVIDED WITH TEMPORARY GROUND COVER, DEVICES OR STRUCTURES SUFFICIENT TO RESTRAIN EROSION. PERMANENT GROUND COVER SHALL BE PROVIDED FOR ALL DISTURBED AREAS WITHIN 15 WORKING DAYS OR NO MORE THAN 90 CALENDAR DAYS.

TOTAL DISTURBED AREA: ±2.26 ACRES.



**1 SILT FENCE DETAIL**  
D-101 NTS

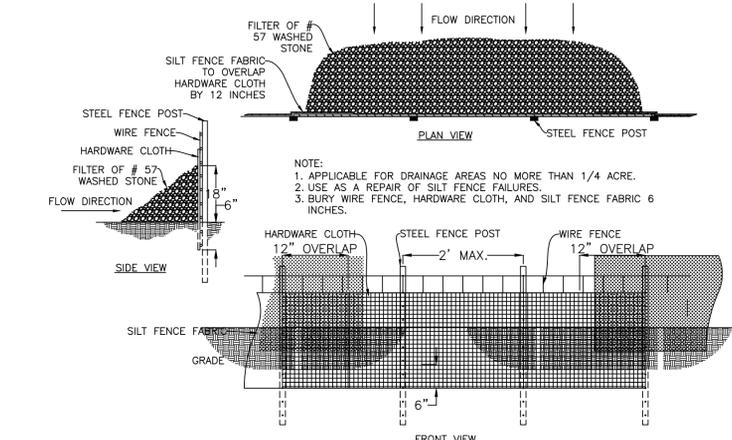


**2 TEMPORARY CONSTRUCTION ENTRANCE**  
D-101 NTS

**3 TEMPORARY SILT FENCE OUTLET**  
D-101 NTS

**4 PERMANENT DIVERSION BERM**  
D-101 NTS

- NOTES:**
- GRAVEL PAD TO BE 25'-0" x 50'-0" AND 6" THICK MINIMUM
  - TURNING RADIUS SUFFICIENT TO ACCOMMODATE LARGE TRUCKS IS TO BE PROVIDED.
  - ENTRANCE(S) SHOULD BE LOCATED TO PROVIDE FOR MAXIMUM UTILITY BY ALL CONSTRUCTION VEHICLES.
  - MUST BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR DIRECT FLOW OF MUD ONTO STREETS. PERIODIC TOP DRESSING WITH STONE SHALL BE NECESSARY.
  - ANY MATERIAL DEPOSITED ONTO THE ROAD MUST BE CLEANED UP IMMEDIATELY.
  - APPLICABLE AT ALL POINTS OF INGRESS AND EGRESS UNTIL SITE IS STABILIZED. FREQUENT CHECKS AND TIMELY MAINTENANCE OF THIS DEVICE MUST BE PROVIDED.



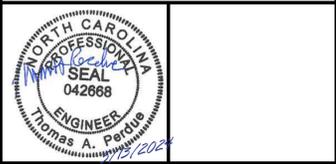
**NOTES**

- SEE C-101 FOR ALL GENERAL NOTES.

REVISIONS		
NO.	DATE	DESCRIPTION

PROJECT MANAGER: TAP	PROJECT ENGINEER: DL
DRAWN BY: DL	CHECKED BY: TAP

DATE:  
MAY 13, 2024



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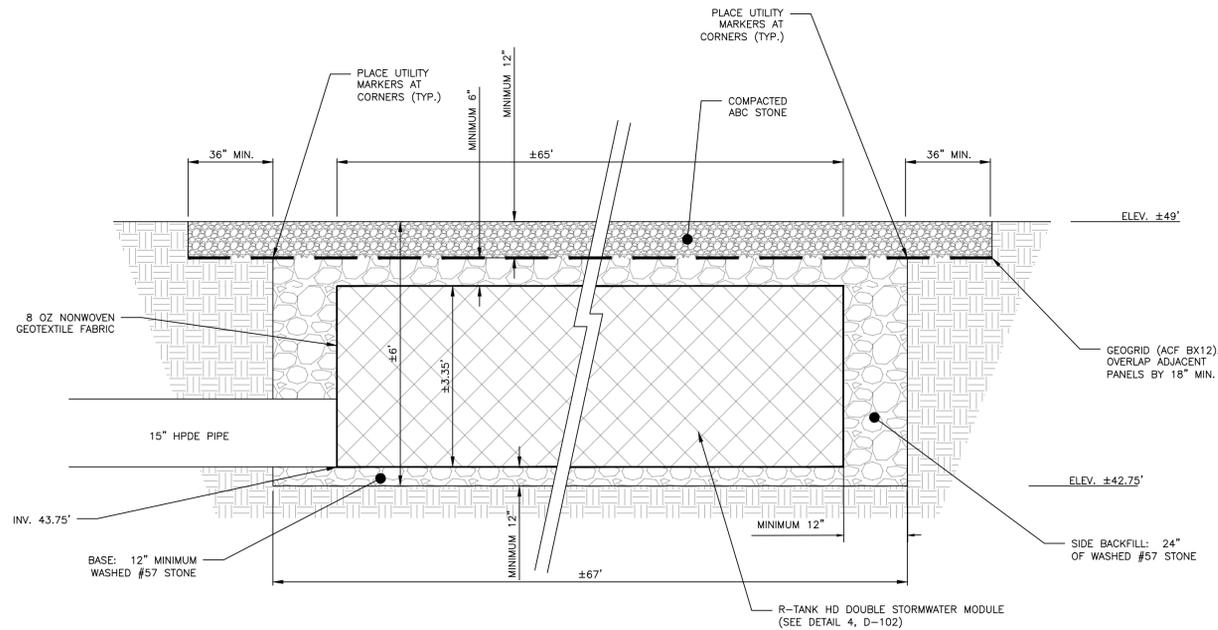
**TW AG + TIMBER, LLC**  
**NC HWY 210 STORAGE LOT**  
**STORMWATER MANAGEMENT PLAN**  
**HAMPSTEAD, PENDER COUNTY, NC**

DETAILS 1 OF 4	
PROJECT NUMBER <b>C20801.00</b>	DRAWING NUMBER <b>D-101</b>

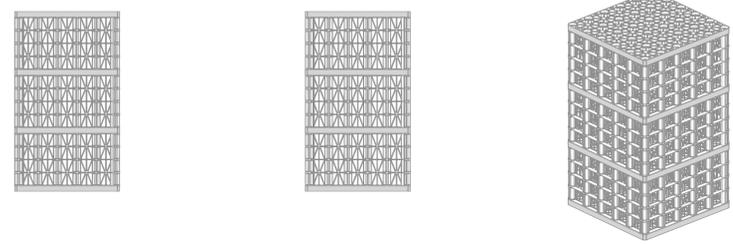
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C20801.00 - TW AG + TIMBER, LLC - NC HWY 210 STORAGE LOT - STORMWATER MANAGEMENT PLAN

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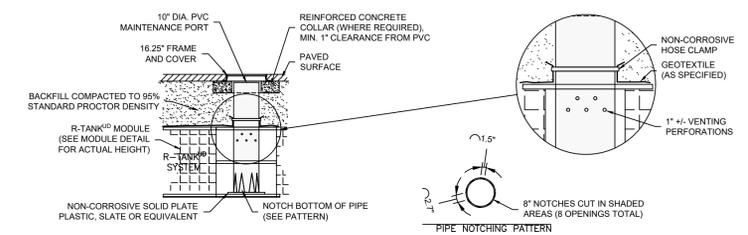
**1 UNDERGROUND STORMWATER CHAMBERS**  
SCALE: NTS



**4 R-TANK UD TRIPLE MODULE**  
SCALE: NTS

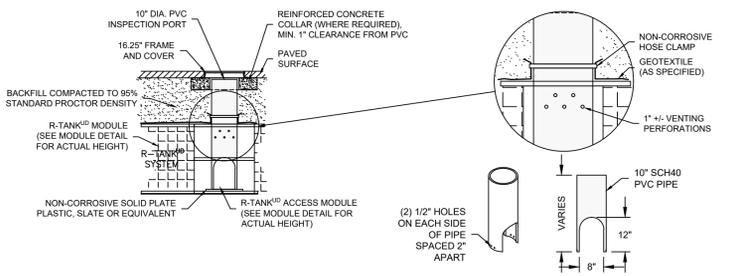
MODULE DATA	
GEOMETRY: LENGTH = 23.62 IN.	LOAD RATING: 134.20 PSI (MODULE ONLY)
WIDTH = 23.62 IN.	HS20/HS25, - SEE SPE FOR COVER REQUIREMENTS
HEIGHT = 40.16 IN.	MATERIAL: 100% RECYCLED POLYPROPYLENE
TANK VOLUME = 12.97 CF	INTERNAL PLATES: 4/SEGMENT, 12/MODULE REQUIRED
STORAGE VOLUME = 12.32 CF	
VOID INTERNAL VOLUME: 95%	
VOID SURFACE AREA: 95%	

- NOTES**
- THIS PORT IS USED TO PUMP WATER INTO THE SYSTEM AND RE-SUSPEND ACCUMULATED SEDIMENT SO THAT IT MAY BE PUMPED OUT.
  - MINIMUM REQUIRED MAINTENANCE INCLUDES A QUARTERLY INSPECTION DURING THE FIRST YEAR OF OPERATION AND A YEARLY INSPECTION THEREAFTER. FLUSH AS NEEDED.
  - R-TANK<sup>®</sup>, R-TANK<sup>®</sup>, R-TANK<sup>®</sup> AND R-TANK<sup>®</sup> MAY BE USED IN TRAFFIC APPLICATIONS.
  - SEE TRAFFIC LOADING DETAIL FOR MINIMUM & MAXIMUM COVER REQUIREMENTS.
  - IF MAINTENANCE PORT IS LOCATED IN A NON-TRAFFIC AREA, A PLASTIC CAP CAN BE USED IN LIEU OF A FRAME AND COVER WITH CONCRETE COLLAR.

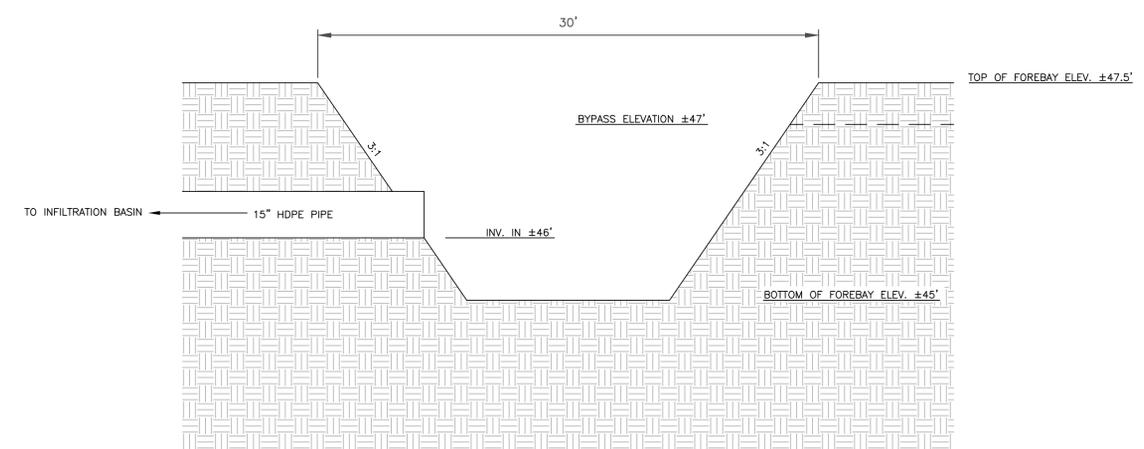


**2 MAINTENANCE PORT DETAIL**  
SCALE: NTS

- NOTES**
- THE INSPECTION PORT IS USED TO ACCESS THE MODULE TO INSPECT THE LEVEL OF SEDIMENT ACCUMULATION.
  - MINIMUM REQUIRED MAINTENANCE INCLUDES A QUARTERLY INSPECTION DURING THE FIRST YEAR OF OPERATION AND A YEARLY INSPECTION THEREAFTER. FLUSH AS NEEDED.
  - R-TANK<sup>®</sup>, R-TANK<sup>®</sup>, R-TANK<sup>®</sup> AND R-TANK<sup>®</sup> MAY BE USED IN TRAFFIC APPLICATIONS.
  - SEE TRAFFIC LOADING DETAIL FOR MINIMUM & MAXIMUM COVER REQUIREMENTS.
  - IF INSPECTION PORT IS LOCATED IN A NON-TRAFFIC AREA, A PLASTIC CAP CAN BE USED IN LIEU OF A FRAME AND COVER WITH CONCRETE COLLAR.



**3 INSPECTION PORT DETAIL**  
SCALE: NTS



**5 FOREBAY DETAIL**  
SCALE: NTS

**NOTES**

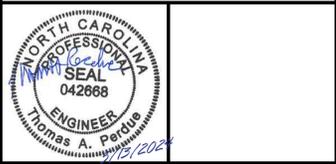
- SEE C-101 FOR ALL GENERAL NOTES.

**LEGEND**

REVISIONS		
NO.	DATE	DESCRIPTION

PROJECT MANAGER: TAP	PROJECT ENGINEER: DL
DRAWN BY: DL	CHECKED BY: TAP

DATE:  
MAY 13, 2024



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**TW AG + TIMBER, LLC**  
NC HWY 210 STORAGE LOT

**STORMWATER MANAGEMENT PLAN**  
HAMPSTEAD, PENDER COUNTY, NC

DETAILS 2 OF 4

PROJECT NUMBER <b>C20801.00</b>	DRAWING NUMBER <b>D-102</b>
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**GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT**

Implementing the details and specifications on this plan sheet will result in the construction activity being considered compliant with the Ground Stabilization and Materials Handling

permittee shall comply with the Erosion and Sediment Control plan approved by the delegated authority having jurisdiction. All details and specifications shown on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

**SECTION E: GROUND STABILIZATION**

Required Ground Stabilization Timeframes		
Site Area Description	Stabilize within this many calendar days after ceasing land disturbance	Timeframe variations
(a) Perimeter dikes, swales, ditches, and perimeter slopes	7	None
(b) High Quality Water (HQW) Zones	7	None
(c) Slopes steeper than 3:1	7	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed
(d) Slopes 3:1 to 4:1	14	-7 days for slopes greater than 50' in length and with slopes steeper than 4:1 -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed
(e) Areas with slopes flatter than 4:1	14	-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed unless there is zero slope

Note: After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing

surface stable against accelerated erosion until permanent ground stabilization is achieved.

**GROUND STABILIZATION SPECIFICATION**

techniques in the table below:

Temporary Stabilization	Permanent Stabilization
<ul style="list-style-type: none"> <li>Temporary grass seed covered with straw or other mulches and tackifiers</li> <li>Hydroseeding</li> <li>Rolled erosion control products with or without temporary grass seed</li> <li>Appropriately applied straw or other mulch</li> <li>Plastic sheeting</li> </ul>	<ul style="list-style-type: none"> <li>Permanent grass seed covered with straw or other mulches and tackifiers</li> <li>Geotextile fabrics such as permanent soil reinforcement matting</li> <li>Hydroseeding</li> <li>Shrubs or other permanent plantings covered with mulch</li> <li>Uniform and evenly distributed ground cover sufficient to restrain erosion</li> <li>Structural methods such as concrete, asphalt or retaining walls</li> <li>Rolled erosion control products with grass seed</li> </ul>

**POLYACRYLAMIDES (PAMS) AND FLOCCULANTS**

- Select flocculants that are appropriate for the soils being exposed during construction, selecting from the NC DWR List of Approved PAMS/Flocculants.
- Apply flocculants at or before the inlets to Erosion and Sediment Control Measures.
- Apply flocculants at the concentrations specified in the NC DWR List of Approved PAMS/Flocculants and in accordance with the manufacturer's instructions.
- Provide ponding area for containment of treated Stormwater before discharging offsite.
- Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

**EQUIPMENT AND VEHICLE MAINTENANCE**

- Maintain vehicles and equipment to prevent discharge of fluids.
- Provide drip pans under any stored equipment.
- Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
- Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
- Remove leaking vehicles and construction equipment from service until the problem has been corrected.
- Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

**LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE**

- Never bury or burn waste. Place litter and debris in approved waste containers.
- Provide a sufficient number and size of waste containers (e.g dumpster, trash receptacle) on site to contain construction and domestic wastes.
- Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Locate waste containers on areas that do not receive substantial amounts of runoff from upland areas and does not drain directly to a storm drain, stream or wetland.
- Cover waste containers at the end of each workday and before storm events or
- Anchor all lightweight items in waste containers during times of high winds.
- Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.
- Dispose waste off-site at an approved disposal facility.
- On business days, clean up and dispose of waste in designated waste containers.

**PAINT AND OTHER LIQUID WASTE**

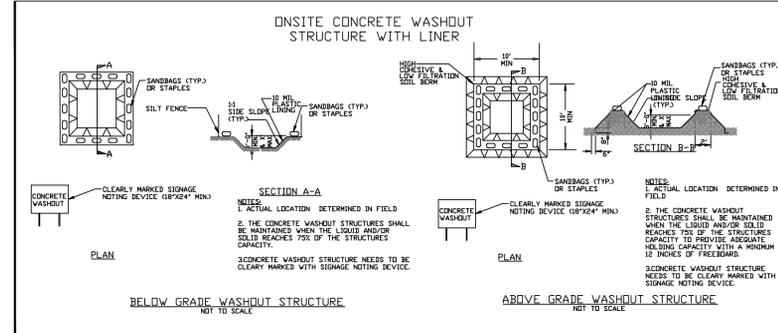
- Do not dump paint and other liquid waste into storm drains, streams or wetlands.
- Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Contain liquid wastes in a controlled area.
- Containment must be labeled, sized and placed appropriately for the needs of site.
- Prevent the discharge of soaps, solvents, detergents and other liquid wastes from construction sites.

**PORTABLE TOILETS**

- Install portable toilets on level ground, at least 50 feet away from storm drains, offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags.
- Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas.
- Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.

**EARTHEN STOCKPILE MANAGEMENT**

- Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls and surface waters unless it can be shown no other alternatives are reasonably available.
- Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile.
- Provide stable stone access point when feasible.
- Stabilize stockpile within the timeframes provided on this sheet and in accordance as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.



**CONCRETE WASHOUTS**

- Do not discharge concrete or cement slurry from the site.
- Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
- Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence.
- Install temporary concrete washouts per local requirements, where applicable. If an alternate method or product is to be used, contact your approval authority for types of temporary concrete washouts provided on this detail.
- Do not use concrete washouts for dewatering or storing defective curb or sidewalk be pumped out and removed from project.
- Locate washouts at least 50 feet from storm drain inlets and surface waters unless it install protection of storm drain inlet(s) closest to the washout which could receive spills or overflow.
- Locate washouts in an easily accessible area, on level ground and install a stone approving authority.
- Install at least one sign directing concrete trucks to the washout within the project
- Remove leavings from the washout when at approximately 75% capacity to limit products, follow manufacturer's instructions.
- At the completion of the concrete work, remove remaining leavings and dispose of caused by removal of washout.

**HERBICIDES, PESTICIDES AND RODENTICIDES**

- Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
- Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.
- Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water
- Do not stockpile these materials onsite.

**HAZARDOUS AND TOXIC WASTE**

- Create designated hazardous waste collection areas on-site.
- Place hazardous waste containers under cover or in secondary containment.
- Do not store hazardous chemicals, drums or bagged materials directly on the ground.

**NOTES**

- SEE C-101 FOR ALL GENERAL NOTES.

**LEGEND**

REVISIONS		
NO.	DATE	DESCRIPTION
1	7/28/2022	ADDED DETAIL SHEET 5

PROJECT MANAGER: TAP	PROJECT ENGINEER: DL
DRAWN BY: DL	CHECKED BY: TAP

DATE:  
MAY 13, 2024



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**TW AG + TIMBER, LLC**  
**NC HWY 210 STORAGE LOT**

**STORMWATER MANAGEMENT PLAN**  
**HAMPSTEAD, PENDER COUNTY, NC**

DETAILS 3 OF 4

PROJECT NUMBER <b>C20801.00</b>	DRAWING NUMBER <b>D-103</b>
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**NCG01 GROUND STABILIZATION AND MATERIALS HANDLING**

EFFECTIVE: 04/01/19

**NOTES**

1. SEE C-101 FOR ALL GENERAL NOTES.

**LEGEND**

**PART III  
SELF-INSPECTION, RECORDKEEPING AND REPORTING**

**SECTION A: SELF-INSPECTION**

Self-inspections are required during normal business hours in accordance with the table below. When adverse weather or site conditions would cause the safety of the inspection personnel to be in jeopardy, the inspection may be delayed until the next business day on which it is safe to perform the inspection. In addition, when a storm event of equal to or greater than 1.0 inch occurs outside of normal business hours, the self-inspection shall be performed upon the commencement of the next business day. Any time when inspections were delayed shall be noted in the Inspection Record.

Inspect	Frequency (during normal business hours)	Inspection records must include:
(1) Rain gauge maintained in good working order	Daily	Daily rainfall amounts. If no daily rain gauge observations are made during weekend or holiday periods, and no individual-day rainfall information is available, record the cumulative rain measurement for those unattended days (and this will determine if a site inspection is needed). Days on which no rainfall occurred shall be recorded as "zero." The permittee may use another rain-monitoring device approved by the Division.
(2) E&SC Measures	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the measures inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Indication of whether the measures were operating properly, 5. Description of maintenance needs for the measure, 6. Description, evidence, and date of corrective actions taken.
(3) Stormwater discharge outfalls (SDCs)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the discharge outfalls inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration, 5. Indication of visible sediment leaving the site, 6. Description, evidence, and date of corrective actions taken.
(4) Perimeter of site	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If visible sedimentation is found outside site limits, then a record of the following shall be made: 1. Actions taken to clean up or stabilize the sediment that has left the site limits, 2. Description, evidence, and date of corrective actions taken, and 3. An explanation as to the actions taken to control future releases.
(5) Streams or wetlands onsite or offsite (where accessible)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If the stream or wetland has increased visible sedimentation or a stream has visible increased turbidity from the construction activity, then a record of the following shall be made: 1. Description, evidence and date of corrective actions taken, and 2. Records of the required reports to the appropriate Division Regional Office per Part III, Section C, Item (2)(a) of this permit.
(6) Ground stabilization measures	After each phase of grading	1. The phase of grading (installation of perimeter E&SC measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopment, permanent ground cover). 2. Documentation that the required ground stabilization measures have been provided within the required timeframe or an assurance that they will be provided as soon as possible.

NOTE: The rain inspection resets the required 7 calendar day inspection requirement.

**PART III  
SELF-INSPECTION, RECORDKEEPING AND REPORTING**

**SECTION B: RECORDKEEPING**

**1. E&SC Plan Documentation**

The approved E&SC plan as well as any approved deviation shall be kept on the site. The approved E&SC plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the E&SC plan shall be kept on site and available for inspection at all times during normal business hours.

Item to Document	Documentation Requirements
(a) Each E&SC measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations shown on the approved E&SC plan.	Initial and date each E&SC measure on a copy of the approved E&SC plan or complete, date and sign an inspection report that lists each E&SC measure shown on the approved E&SC plan. This documentation is required upon the initial installation of the E&SC measures or if the E&SC measures are modified after initial installation.
(b) A phase of grading has been completed.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate completion of the construction phase.
(c) Ground cover is located and installed in accordance with the approved E&SC plan.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate compliance with approved ground cover specifications.
(d) The maintenance and repair requirements for all E&SC measures have been performed.	Complete, date and sign an inspection report.
(e) Corrective actions have been taken to E&SC measures.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate the completion of the corrective action.

**2. Additional Documentation to be Kept on Site**

In addition to the E&SC plan documents above, the following items shall be kept on the site and available for inspectors at all times during normal business hours, unless the Division provides a site-specific exemption based on unique site conditions that make this requirement not practical:

- (a) This General Permit as well as the Certificate of Coverage, after it is received.
- (b) Records of inspections made during the previous twelve months. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically-available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.

**3. Documentation to be Retained for Three Years**

All data used to complete the e-NOI and all inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

**PART II, SECTION G, ITEM (4)  
DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT**

Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be drawn down for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw water from the surface shall be rare (for example, times with extended cold weather). Non-surface withdrawals from sediment basins shall be allowed only when all of the following criteria have been met:

- (a) The E&SC plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal shall not commence until the E&SC plan authority has approved these items,
- (b) The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part III, Section C, Item (2)(c) and (d) of this permit,
- (c) Dewatering discharges are treated with controls to minimize discharges of pollutants from stormwater that is removed from the sediment basin. Examples of appropriate controls include properly sited, designed and maintained dewatering tanks, weir tanks, and filtration systems,
- (d) Vegetated, upland areas of the sites or a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in Item (c) above,
- (e) Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and
- (f) Sediment removed from the dewatering treatment devices described in Item (c) above is disposed of in a manner that does not cause deposition of sediment into waters of the United States.

**PART III  
I SELF-INSPECTION, RECORDKEEPING AND REPORTING**

**SECTION C: REPORTING**

**1. Occurrences that Must be Reported**

Permittees shall report the following occurrences:

- (a) Visible sediment deposition in a stream or wetland.
- (b) Oil spills if:
  - They are 25 gallons or more,
  - They are less than 25 gallons but cannot be cleaned up within 24 hours,
  - They cause sheen on surface waters (regardless of volume), or
  - They are within 100 feet of surface waters (regardless of volume).
- (c) Releases of hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA (Ref: 40 CFR 302.4) or G.S. 143-215.85.
- (d) Anticipated bypasses and unanticipated bypasses.
- (e) Noncompliance with the conditions of this permit that may endanger health or the environment.

**2. Reporting Timeframes and Other Requirements**

After a permittee becomes aware of an occurrence that must be reported, he shall contact the appropriate Division regional office within the timeframes and in accordance with the other requirements listed below. Occurrences outside normal business hours may also be reported to the Department's Environmental Emergency Center personnel at (800) 858-0368.

Occurrence	Reporting Timeframes (After Discovery) and Other Requirements
(a) Visible sediment deposition in a stream or wetland	<ul style="list-style-type: none"> <li>• <b>Within 24 hours</b>, an oral or electronic notification.</li> <li>• <b>Within 7 calendar days</b>, a report that contains a description of the sediment and actions taken to address the cause of the deposition. Division staff may waive the requirement for a written report on a case-by-case basis.</li> <li>• If the stream is named on the <a href="#">NC 303(d) list</a> as impaired for sediment-related causes, the permittee may be required to perform additional monitoring, inspections or apply more stringent practices if staff determine that additional requirements are needed to assure compliance with the federal or state impaired-waters conditions.</li> </ul>
(b) Oil spills and release of hazardous substances per Item 1(b)-(c) above	<ul style="list-style-type: none"> <li>• <b>Within 24 hours</b>, an oral or electronic notification. The notification shall include information about the date, time, nature, volume and location of the spill or release.</li> </ul>
(c) Anticipated bypasses [40 CFR 122.41(m)(3)]	<ul style="list-style-type: none"> <li>• <b>A report at least ten days before the date of the bypass, if possible.</b> The report shall include an evaluation of the anticipated quality and effect of the bypass.</li> </ul>
(d) Unanticipated bypasses [40 CFR 122.41(m)(3)]	<ul style="list-style-type: none"> <li>• <b>Within 24 hours</b>, an oral or electronic notification.</li> <li>• <b>Within 7 calendar days</b>, a report that includes an evaluation of the quality and effect of the bypass.</li> </ul>
(e) Noncompliance with the conditions of this permit that may endanger health or the environment [40 CFR 122.41(l)(7)]	<ul style="list-style-type: none"> <li>• <b>Within 24 hours</b>, an oral or electronic notification.</li> <li>• <b>Within 7 calendar days</b>, a report that contains a description of the noncompliance, and its causes; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time noncompliance is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. [40 CFR 122.41(l)(6).</li> <li>• Division staff may waive the requirement for a written report on a case-by-case basis.</li> </ul>



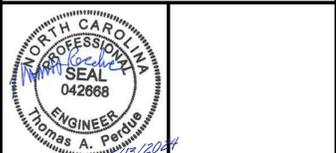
**NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING**

**EFFECTIVE: 04/01/19**

REVISIONS		
NO.	DATE	DESCRIPTION
1	7/28/2022	ADDED DETAIL SHEET 5

PROJECT MANAGER: TAP	PROJECT ENGINEER: DL
DRAWN BY: DL	CHECKED BY: TAP

DATE:  
MAY 13, 2024



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**TW AG + TIMBER, LLC  
NC HWY 210 STORAGE LOT**

**STORMWATER  
MANAGEMENT PLAN  
HAMPSTEAD, PENDER  
COUNTY, NC**

**DETAILS 4 OF 4**

PROJECT NUMBER <b>C20801.00</b>	DRAWING NUMBER <b>D-104</b>
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